



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,467	11/07/2001	Hiroshi Inoue	09792909-5258	3706
26263	7590	12/23/2005	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP			WILLS, MONIQUE M	
P.O. BOX 061080			ART UNIT	
WACKER DRIVE STATION, SEARS TOWER			PAPER NUMBER	
CHICAGO, IL 60606-1080			1746	

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/053,467

Applicant(s)

INOUE ET AL.

Examiner

Monique M. Wills

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-7 and 9-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4-7 and 9-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 07 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

This Office Action is responsive to the Amendment filed October 24, 2005. Claims 1-2, 4-7 & 9-12 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kawakami et al., U.S. Patent 6, 432,585. A brief reiteration is recited below.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 4-7 & 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawakami et al., U.S. Patent 6, 432,585.

With respect to claims 1 & 6, Kawakami teaches a negative electrode comprising tin, copper and bismuth (col. 52, lines 45-65). With respect to claims 2 & 7, the reference teaches a negative electrode comprising Regarding claim 6, the anode is employed in a non-aqueous electrolyte (col. 29, lines 10-20). With respect to claims 11 & 12, the negative electrode further contains a carbonaceous material consisting of graphite (col. 52, lines 55-68). The prior art of Kawakami anticipates the instant claims as set forth. The limitation in claims 4 & 9, with respect to the A-B-C composition having low crystallinity, is considered to be an inherent property of the electrode composition as set forth in the prior art, because Kawakami employs the same electrode material set forth by Applicant. The limitation in claims 5 & 10, with respect to the A-B-C

Art Unit: 1746

composition being amorphous, is considered to be an inherent property of the electrode composition as set forth in the prior art, because Kawakami employs the same electrode material set forth by Application. The limitation in claim 11, with respect to the negative electrode further containing a carbonaceous material which is capable of being doped and un-doped with lithium, is considered to be an inherent property of the electrode composition as set forth in the prior art, because Kawakami employs the same carbonaceous graphite additive set forth by Applicant.

### *Response to Arguments*

Applicant's arguments filed October 24, 2005 have been fully considered but they are not persuasive. Specifically, Applicant contends that Kawakami is not anticipatory, because the reference only discloses tin alloys containing Silicon preferably in the range of 50% to less than 100% or more preferably 70% to less than 100% (col. 16, lines 7-10), which is outside of the instant range of 5 to 40%. This argument is not persuasive. The citation that Applicant refers to requires that Tin, not Silicon, is in the range of 50% to less than 100% or more preferably in an amount in the range of 70% to less than 100% (col. 16, lines 7-10). Furthermore, Applicant asserts that the Examiner erroneously interpreted

Art Unit: 1746

the range of 4 to 40% as atomic ratio not *weight %*. Therefore, concluding that the atomic ration calculated, fell within the range of 5 to 40 *atomic %*. Instead, it was argued that, absent evidence to the contrary, an atomic percent of 26.5% falls within the range of 5 to 40 *weight %*. Therefore, claims 1-2, 4-7 & 9-12 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kawakami et al., U.S. Patent 6, 432,585.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1746

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Michael Barr, may be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 1746

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

12/20/05

**MICHAEL BARR**  
**SUPERVISORY PATENT EXAMINER**

A handwritten signature in black ink, appearing to read "Michael Barr", with a large, sweeping underline that extends to the left and then curves back under the signature.